

**Amendments to the Specification:**

Page 1, before line 5, the paragraph beginning with "The present invention" insert the following titles and paragraph:

**-- PRIORITY CLAIM**

This is a U.S. national stage of application No. PCT/EP2004/053654, filed on 22 December 2004. Priority is claimed on the following application(s): Country: Germany, Application No.: 103 60 380.8, Filed: 22 December 2003; Country: Germany, Application No.: 103 60 379.4, Filed: 22 December 2003; Country: Germany, Application No.: 103 60 364.6, Filed: 22 December 2003; Country: Germany, Application No.: 103 61 203.3, Filed: 24 December 2003; and Country: Germany, Application No.: 103 61 223.8, Filed: 24 December 2003, the contents of which are incorporated here by reference.

**BACKGROUND OF THE INVENTION --**

Page 2, before line 3, the paragraph beginning with "It is therefore", insert the following title:

**SUMMARY OF THE INVENTION**

Please replace the paragraph beginning on page 2, line 6, with the following amended paragraph:

~~-- To fulfill this object a method with the features in claim 1 is proposed. Preferred~~  
~~embodiments are defined in the dependent claims.~~ The object is met by a method of converting

heat energy generated in an evaporator to mechanical energy in which a working fluid is evaporated in the evaporator and expanded in a low-pressure expansion device, wherein the low-pressure expansion device is a roots blower arranged and dimensioned such that the working fluid is expanded therein and heat energy is transformed to mechanical energy. --

Please replace the paragraph beginning on page 5, line 20, with the following amended paragraph:

-- The object of the invention is also ~~fulfilled~~ met by an expansion device for converting heat energy to mechanical energy by expanding an evaporated working fluid wherein the expansion device is a low-pressure expansion device designed as a roots blower ~~having the features of claim 15. Preferred embodiments are defined in the dependent claims. --~~

Page 6, before line 14, the paragraph beginning with "Figure 1 shows", insert the following titles and paragraph:

**-- BRIEF DESCRIPTION OF THE DRAWINGS**

In the drawings:

Fig. 1 is a schematic diagram showing a system for performing the method according to the present invention; and

Fig. 2 is a schematic diagram of a roots blower with multi-blade rotors.

**DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS --**

Please replace the paragraph beginning on page 6, line 14, with the following amended paragraph:

-- Figure 1 shows a method for converting heat energy generated in an evaporator 6 to mechanical energy by expanding an evaporated working fluid which is evaporated in evaporator 6 and expanded in a low-pressure expansion device 2. The working fluid in the present embodiment is water which is fed to expansion device 2 which is formed as a roots blower 2 in its evaporated aggregate state. During the expansion process the heat energy contained in the working fluid is converted to mechanical energy in roots blower 2. Roots blower 2 is coupled to a generator 1 and drives it, thereby converting mechanical energy to electric energy. The roots blower 2 may, for example, have multi-blade rotors 4,5 as shown in Fig. 2. --

Please replace the paragraph beginning on page 6, line 25, with the following amended paragraph:

-- ~~Heat exchanger 7 is downstream of a~~ A separator 3 is arranged downstream of the  
heat exchanger 7 and ~~which~~ extracts part of the condensed working fluid for injection into roots blower 2. Roots blower 2 has a plurality of injection openings (not shown) through which the condensed working fluid is injected into the suction chamber of roots blower 2, wherein part of the evaporated working fluid is condensed in roots blower 2, whereby the output pressure is reduced and therefore the efficiency is improved. Due to the pressure differential with respect to heat exchanger 7 coupled to the outlet of roots blower 2, the rotors arranged in roots blower 2 are driven by the working fluid being expanded, and the change in entropy

accompanying the expansion is given off as mechanical energy. A pump 9 is downstream of separator 3, which recycles the condensed working fluid into evaporator 6.

Please delete page 8 in its entirety.

Page 9, amend the title as follows:

-- ~~Claims~~ What is claimed is: --

Please amend the Abstract as shown on a separate page attached hereto.